S/S. EMPIRE DICKENS

FURNESS S. B. Co Ltd No 341.

PROFILE & DECKS

AS. BUILT.

14

RETAIN

S. "Empire Dickens"
MDB. RPT. No [illegible]

Esso Appalachee

005020-005028-0161

341 [redacted]

– PROFILE & DECK PLAN. –

DIMENSIONS LENGTH B.P. 475'-0". BREADTH M^LD 68'-0" DEPTH M^LD 36'-0"

SCALE 1/8" = 1 FOOT

POOP DECK
REFRIG SPACE
CASING SIDE ·26
STIFFENERS 4 x 2½ x ¼
SPACED 45" APART
12 x 4 x 4 x ½ CHAN^L
10 x 3½ x 7/16 BA
WASH BH^D
STRINGER
W.T. FLAT.
BEAMS 7 x 3 x ·33 BA
WATER BALLAST
STRUT BEAMS 6 x 6 x ·50
X STRUTS FITTED AT 3 & 6 FRAMES
F.W. TANKS
FLAT 7 x 3 x ·33 N.B.S.
SIDE STRINGER
TRANSVERSE
BH^D 12'-0" FROM ℄ TO SHIPS SIDE
WELL
FEED WATER
COFFERDAM
OIL FUEL OR WATER BALLAST
OIL FUEL TANK
℄ LINE WASH BULK^D
O.T. BH^D
OIL FUEL BUNKER
℄ BH^D OILTIGHT (NOT CAULKED)
CENTRE GIRDER CARRIED THROUGH
24" SPACING
21" SPACING
30" SPACING
30¾" SPACING
27½" SPACING
14'-9"
62'-9"
27'-6"
9'-0"
3'-0"
½ L
FRAMES 7 x 3½ x 3/8" BA CONTINUOUS TO POOP DECK
PEAK FRAMES 7 x 3½ x 3/8 BA CONTINUOUS TO POOP DECK
FRAMES IN POOP 5 x 3 x 3/8 OA.
LONG^L FRAMING BELOW UPPER DECK
PEAK FLOORS ·40 FLGE 3½"
FLOORS ·40
FLOOR N^O 10 ·52
" N^O 13 + 14 ·56
FLOORS ·44
FLOORS N^OS 23 + 24 ·52
LONGITUDINAL FRAMING IN BOTTOM.
UPPER DECK
PUMP ROOM ENTRANCE
SIDE PLATES ·36
TOP ·30
TOP ANGLES 3 x 3 x 5/16
STIFF^RS 5 x 3 x 3/8 SPACED 24" APART
FOUNDATION BAR 3½ x 3½ x 3/8
GIRDER AT ℄
PLATE ·40
FACE BAR 6 x 3½ x ·40 OA.
N^O 6 CENTRE TANK
N^O 5 CENTRE TANK
N^O 4 CENTRE TANK
PUMP ROOM
N^O 3 CENTRE TANK
N^O 2 CENTRE TANK
N^O 1 CENTRE TANK
ACCOM
DECK STORES ETC
WASH BH^D AT CENTRE
O.T. BH^D AT SIDE
50'-0"
25'-0"
31'-1"
24'-3½"
3/5 L
BACK BARS TO BOTTOM LONG^LS IN CENTRE TANKS & N^O 1 WING TANKS ON FLAT OF BOTTOM
BACK BARS 3½ x 3½ x ·40
INTERCOSTAL PLATES ·36
FACE BAR 6 x 3 x ·36 OA
SHELL CONNECTIONS 6 x 6 x ·40
AT 78A 79A 80A
TRANSVERSE INTERCOSTALS IN CENTRE TANK FOR^D OF FR 78 ALSO IN N^O 1 WING TANKS ON FLAT OF BOTTOM
TRUNK TO PUMP ROOM
COFFERDAM
DRY CARGO HOLD OR STORES
TRANS 18" x ·36
FACE BAR 3½ x 3½ x 7/16
SHELL LONG^LS 8 x 3½ x ·35 BA
BEAMS 8 x 3½ x ·35
PUMP ROOM ON PORT SIDE
DEEP TANK
OIL FUEL OR WATER BALLAST
WASH BH^D ON ℄
STIFF^RS 9 x 3½ x 3/8 BA
12 x 4 x 4 x 43/60 CHAN^L
10 x 3½ x 7/16 BA
CHAIN LOCKER
W.T. BH^D
WASH BH^D
STRINGER
PILLARS 4 x 4 x ·50
FORE PEAK WATER BALLAST
INTERCOSTALS ·40 FLANGED 3"
TWEEN DK FRAMES 5 x 3 x 5/16 WELDED AT FOOT
ANGLE PILLARS 4 x 4 x ½ ON ALT. BEAMS
F'CLE DK
25" FRAME SPACING
24" FRAME SPACING
FLOORS 33" x ·40 WITH 3 x 3 x 3/8 REV BAR
FRAMES IN DEEP TANK 10 x 3½ x ·43 BA
3½ x 3½ x 3/8 BACK BAR ON BOTTOM
FLOORS IN PEAK ·40 FLANGED 3½"
PEAK FRAMES 9 x 3½ x 3/8 BA TO F'CLE DK.
BEAMS IN PEAK 6 x 6 x ·50
STRINGERS 36" x ·40
3" FLANGE ON FACE
F'CLE DECK
STRG^R ANGLE 3½ x 3½ x 7/16
RUNNER BELOW P & S
DECK ·27
UNDER WINDLASS ·50
RUNNER BELOW
BEAMS 6 x 3½ x 5/16 BA
KNEES 17 x ·30 4-¾ RIVS
DECK LONGITUDINALS 8 x 3½ x ·35 BA
ENGINE CASING
BOILER CASING
N^O 6 WING TANK
N^O 5 WING TANK
N^O 4 WING TANK
N^O 3 WING TANK
N^O 2 WING TANK
N^O 1 WING TANK
POOP DECK
BH^D BELOW P & S
STAIRWAY P & S
GALLEY
12 x 3½ x 3½ x ½ CHAN^L GIRDER P & S
BEAMS 6 x 3½ x 5/16 BA
KNEES 17" x ·30 4-¾" RIVS
8 x 3½ x ·35 BA
KNEES 22" x ·32 FL 2" 6-¾" RIVS
ENGINE CASING
BOILER CASING

T.N 4415

Issue No. X29411
Ship Drawing Office
Date 14-4-42
HAVERTON HILL-ON-TEES

005020-005028-0161

RETAIN

S/S. "EMPIRE DICKENS"

FURNESS. S.B. Co. LTD No 341

MIDSHIP SECTION

AS BUILT.

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S.S. "Empire Dickens"
MDB. RPT. No. 14239

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005020-005028-0160

MIDSHIP SECTION. 341[redacted]

LENGTH. B.P. 475·0" × BREADTH MLD. : 68·0" × DEPTH MLD. 36·0"

SCALE :- ½" = 1 FOOT.

ANCHORS 2 STOCKLESS 85½ CWTS EACH
" 1 SPARE 73½ "
" 1 STREAM 25 "
CABLES 240 FTHMS 2 9/16 STUD CHAIN OR 2¼" TAYCO.
STREAM WIRE 105 " 4½" 6/24 STEEL WIRE
TOWLINE " 130 " 5¼" 6/24 " "
HAWSERS & WARPS 2 @ 90 FTHMS 3½ HEMP OR MANILLA.
2 @ 90 " 7½" " "
SHEER OF 5·0 FORD & 3·9 AFT. (STANDARD CURVE)
28·0 LOAD DRAFT (ASSUMING STANDARD SHEER 9·7 FORD & 4·9½ AFT.
POOP SIDE PLATING ·42" (@ 30¾" SPACING)
FORECASTLE SIDE PLATING ·46
STRINGER PLATE PROPOSED 87½·82 FROM WITHIN POOP TO ½ L FORD OF ⊗ TO ·44 AT ENDS.
BUTTS QUINTUPLE FOR ½ L TO QUADRUPLE & TREBLE AT ENDS.
RIVS. SPACED 4 DIAS. IN QUAD. BUTTS. 3½ DIA. IN TREBLE BUTTS
" " 4½ " " QUINTUPLE BUTTS.
DECK BUTTS IN WAY OF OIL TREBLE RIVETED. DOUBLE RIV. BEYOND. RIVETS IN BUTTS & SEAMS SPACED 4 DIAS OVER ·50 & 3½ DIAS. UNDER ·50 THICKNESS
DECK LONGITUDINALS 8" × 3½ × ·35 B.A. (AT 3·0 SPACING.) RIVETS SPACED 6 DIAS.
NOTE :- HATCH COAMINGS NOT IN LINE (SEE DECK PLAN)
STRINGER ANGLE 7 × 7 × ·82 FROM WITHIN POOP TO 20% L. FORD OF ⊗ TO ·60 & 3½. 3½. ·36 AT ENDS.
RIVETS SPACED 5 DIAS.
6" TUMBLE HOME
LONGL 7 × 3½ × ·50 B.A. RIVETS 6 DIAS.
BUTTS QUAD. FOR 50% L.
HATCH 4·0 WIRE
CAMBER 17"
CENTRE TANK BEAM 27" × ·40 FACE BAR 5" × 3½ × ·40" O.A. SINGLE.
WING TANK BEAM 27" × ·40
K STRAKE. PROPOSED 72" × 1·00 FOR 50% L. FORD AND TO WITHIN POOP AFT TO ·46" AT ENDS.
BUTTS. QUIN. RIVETS 4½ DIAS
" QUAD. UNDER ·84"
" TREBLE. " ·60"
SHEERSTRAKE INCREASED 20% AT POOP FRONT
RIVETS SPACED 4 DIAS.
BUTTS DOUBLE STRAPS TREBLE RIVETED FOR 50%
No 1. 7 × 3½ × ·40" B.A.N.B.S.
No 2. 7 × 3½ × ·40 B.A.N.B.S.
J STRAKE PROPOSED 90" × ·77 FOR 50% L. TO ·46" AT ENDS.
BUTTS QUAD. FOR 50% L.
" TREBLE BELOW ·60. RIVETS 4 DIAS.
No 3. 7 × 3½ × ·40 B.A.N.B.S.
No 4. 7 × 3½ × ·43 B.A.N.B.S.
No 5. 8 × 3½ × ·36 B.A.
H STRAKE. 95 × ·64 FOR 50% L (2 LONG. BHDS) TO ·48" AT ENDS.
BUTTS TREBLE RIVETED. SPACED 3½ DIAS FOR 50% TO 4 DIAS.
No 6. 8 × 3½ × ·36 B.A.
No 7. 8 × 3½ × ·44 B.A.
No 8. 9 × 3½ × ·37 B.A.
G STRAKE 90" × ·64 FOR 50% L (2 LONG BHDS) TO ·48" AT ENDS.
BUTTS TREBLE RIVETED. SPACED 3½ DIAS FOR 50% L TO 4 DIAS.
No 9. 9 × 3½ × ·37 B.A.N.B.S.
No 10. 9 × 3½ × ·41 B.A.N.B.S.
F STRAKE 69 × ·64 FOR 50% L. (2 LONG. BHDS) TO ·48 AT ENDS.
BUTTS TREBLE RIVETED. SPACED 3½ DIAS FOR 50% L. TO 4 DIAS.
No 11. 10 × 3½ × ·40 B.A.N.B.S.
No 12. 11 × 3½ × ·43 B.A.
No 13 12 × 3½ × 3½ × ·42/50 N.B.S.
RIVETS IN SHELL SEAMS SPACED 3½ DIAS. OVER ·50" THICKNESS
" " 3" UNDER ·50
RIVETS IN LONGLS SPACED 6 DIAS.
RIVETING OF LONGLS AS FOR LONGL BHD.
WITH TWO LONGL BHDS
RISE OF FLOOR
E STRAKE 78¾ × ·76 FOR 50% L. TO ·50 AT ENDS
BUTTS QUINT. FOR ½ L TO QUAD. & TREBLE AT ENDS.
RIVETS SPACED 4½ & 4 DIAS.
WING FLOOR 36" × ·44 FACE BAR 6 × 3½ × ·40 O.A. SINGLE. RIVETS 6 DIAS
FACE BAR SUPPORT LUG 6 × 3 × ·40
INTERCOSTAL DOCKING GIRDER ·42
COMPENSATION B.A. 6 × 3½ × ·46 IN WAY OF PIPE HOLE
3·0 LONG STRAP OVER FLOORS 3½ × 3½ × ·40
BOTTOM STRAKE ·50
No 14 9" × 3½ × ·46 B.A.
3½ × 3½ × ·41 RIV. SPACED 5 DIAS.
3½ × 3½ × ·46 BACK BARS
BOTTOM LONGITUDINALS 15" × 4 × 4 × ·41/·62 AT 3·0 SPACING.
D STRAKE 90" × ·76 FOR 50% L TO ·52" AT ENDS.
C STRAKE 87"
B STRAKE 93½
A STRAKE 82¾
KEEL 54 × 1·00 FOR 70% L. ⊗ TO ·86 AT AFTER END. MIDSHIP THICKNESS MAINTAINED TO 5% L. FROM STEM.
BUTTS DOUBLE STRAPS TREBLE RIV. ½ L. SPACED 4 DIAS.
" QUADRUPLE AT ENDS. " 4
BOTTOM SHELL PLATING ·76 FOR 36 SPACING FOR 50% AMIDSHIPS :- ·70 FOR 30 SPACING
PLATING ON FLAT OF FLOOR FROM ½ L FORD TO 5% FROM STEM TO BE INCREASED 15% OVER ABOVE THICKNESS.
" AT AFTER END (BEYOND 50% L. AMIDSHIPS) REDUCED TO ·52 AT END.
" " FORE " (ABOVE FLAT OF FLOOR " " ·52 " "
BUTTS QUINTUPLE FOR ½ L. TO QUAD. & TREBLE AT ENDS, RIVETS SPACED TO RULE.
RIVETS BETWEEN TRANSVERSES SPACED 6 DIAS & 3½ DIAS FOR 9 RIVETS EACH SIDE OF TRANSVERSES AT 8-11 SPACES, AND FOR 7 RIVETS EACH SIDE OF TRANS. AT 7-2 SPACES.
RIVETS TO BE 4½ DIAS THROUGHOUT No 1. WING AND CENTRE TANKS.
WING TANK WASH BULKHEAD
UPPER & LOWER GIRDERS 24" × ·36 WITH 5" FLANGE.
OILTIGHT CENTRE BULKHEAD
UPPER GIRDER 42" × ·40 FACE BAR 7 × 3½ × ·40 B.A.N.B.S.
LOWER " 42" × ·40 " " 10 × 3½ × ·60
THE GIRDERS & VERTICAL STIFFENING IN No 1. TANKS ARE TO BE INCREASED IN STRENGTH ACCORDING TO GREATER SPAN & DEPTH.
NOTE :- CHANNEL STRUT & TIE IN WING TANK BETWEEN UPPER & LOWER GIRDER SUPPORTS
SECTION THROUGH O.T. BULKHEAD.
RIVETS CLOSED UP TO 4 DIAS BOTH FLANGES
OILTIGHT WING BULKHEAD
UPPER GIRDER 36" × ·40 FACE BAR 6 × 3½ × ·40 O.A.
LOWER GIRDER 36" × ·40 " " 10 × 3½ × ·40 B.A.
6 × 6 × ·40 LUG WITH 12 - 7/8 RIVS (LOWER GIRDER) 10 - 7/8 " (UPPER)
SHELL WEB ·30
SAME CONNECTIONS FOR BHD WEB (21)
GIRDERS. CENTRE WASH BULKHEAD UPPER & LOWER PLATE 24" × ·36" WITH 5" FLANGE.
WASH BHD. TO DECK LONGL BRACKETS
OILTIGHT CENTRE BULKHEAD
UPPER GIRDER
LOWER GIRDER
WING WASH BULKHEAD
VERTICAL STIFFS 12 × ·34 B.A.N.B.S.
OILTIGHT WING BULKHEAD
CENTRE WASH BHD
ELEVATION OF DOCKING GIRDER.
INTERCOSTAL GIRDER
BRACKETS TO TRANSVERSE IN CENTRE TANK. (No 66 FRAME) TO REDUCE SPAN.
FACE BAR SUPPORT LUG. 6 × 3 × ·40
LONGL WELDED EACH SIDE
BRACKETS AT No 13 LONGITUDINAL
SECTION SHOWING BRACKETS TO BOTTOM LONGITUDINALS.
WASH BHD
TRANSVERSE
O.T. BULKHEAD
6½, 6½ × ·55 T. (MIN. ROLLING)
LONGL WELDED EACH SIDE
6¾" DIA. HOLES TO TAKE HEATING COILS.

X29410
14-4-42.

005030-005088-0140

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STERN FRAME
& RUDDER
FURNESS S.B. C^o L
341·2·34-49·50

S.S. "Empire Dickens"
MDB. RPT. No. 17239
S.S. Empire Norseman
MDB. RPT. No. 17276
S.S. Empire Lytton
MDB. RPT. No. 17323
S.S. Empire Grenadier
MDB. RPT. No. 17347
S.S. Empire Nugget
MDB. RPT. No. 17375
S.S. Empire Cobbett.
MDB. RPT. No.
M/V 'San Wilfrido'

RECORDS DEPT.
LONDON.

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Foundation

005307-005310-0001

S.S. Nos 341-2-3-4, 49-50

RUDDER

Scales ½. 1 = 1 Foot

PRINCIPAL DIMENSION.

Length B.P.	476-4½
Breadth Mld.	68-0
Depth Mld.	36-0
Draft	28-0
Speed	11½ knots.

~~738 To B.C. Survey & Requirements~~

~~739~~ To Lloyds Survey & Requirements.

S.S. Nos 341-2-3-4.~ 49~50

FABRICATED STERN FRAME & RUDDER

Scales ½ & 1 & 1½ = 1 Ft.

Principal Dimensions

Length B.P.	476-4½
Breadth Mld	68-0
Depth Mld	36-0
Draft	28-0
Speed	11½ knots

~~738 To B.C. Survey & Requirements~~

~~739~~ To Lloyd's Survey & Requirements

Area of Rudder Plating – 140 sq ft

Cr of Grav. of Area aft of ℄ of Pintles = 3·46 ft

$\cdot 26 \sqrt[3]{129 \cdot 50 \times 3 \cdot 46 \times 12} =$ ~~10½ B.C~~

11" Lloyds

Arrangement of Top Arm & Coupling
Scale 1 = 1 Ft
Collars to be welded on stock after rudder is shipped
Keyway for tiller
Keyway for Carrier
10½ Dia. B.C
11 Dia. Lloyds
5½ B.C.
5¾ Lloyds
43-7 From Base Approx Height
40-1 From Base
Approx. Length of Top Piece
Plan View at Top Arm
Moulded Half Breadths for Rudder
Plates
Plates welded to arm in addition to rivets
Cast Steel Arm
Cut away for turning
Section 15' aft of Transom Frame
Section at Transom Frame
Weld
Plan View of Top
Plan of Bottom Arm
Plates welded to arms in addition to rivets
Base Line
Section 14·6 above Base
No electrode on strength welds to be less than ⅛"
Drilled for angle conn. to No 5 floor
1½ web
Section at No 3 Frame
1½ Centre Web
Arrangement of Transom Connections
Section at B.B
Extension for connection of transom bar
Section at A.A
Section at No 2 Frame
Section at No 4 Frame
Section at 17·3 above Base
Section thro Boss
Section Below Boss
2 Guide Plates
Welded butt in plate with cover strap welded
2 Rows of 1⅛ Dia. Holes for Shell Rivets
3 Rows of 1⅛ Dia. Rivets, rivets spaced 5" apart
Section 3-0 above Base
Templates to be supplied for shape of keel
Section thro C.C
Extent of 1⅛ Bottom Plate
1¼ Bottom Plate
Solid Steel Disc
Base Line

FURNESS SHIPBUILDING COMPANY, LTD.
Issue No. X29347
Ship Drawing Office.
Date 30.3.42
HAVERTON HILL-ON-TEES

T. No 4492

005307-005310-0001